

Service Manual



PRS-D5000SPL/X1H/EW

ORDER NO.
CRT3326

CLASS D MONO AMPLIFIER

PRS-D5000SPL /X1H/EW

PRS-D5000SPL /X1H/UC



For details, refer to "Important check points for good servicing".

PIONEER CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS (USA) INC. P.O.Box 1760, Long Beach, CA 90801-1760 U.S.A.
PIONEER EUROPE NV Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE.LTD. 253 Alexandra Road, #04-01, Singapore 159936

SAFETY INFORMATION

CAUTION

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.
Health & Safety Code Section 25249.6 - Proposition 65

● Service Precaution

You should conform to the regulations governing the product (safety, radio and noise, and other regulations), and should keep the safety during servicing by following the safety instructions described in this manual.

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol.
Please be sure to confirm and follow these procedures.

1. Product safety



Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

- ① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

- ② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification(addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

- ③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris.
Soldering should be finished with the proper quantity. (Refer to the example)

- ④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

- ⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

- ⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs.
In addition, be sure that there are no pinched wires, etc.

- ⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

- ⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages.
If you find a damaged power cord, please exchange it with a suitable one.

- ⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

- ⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries.
Please pay attention to your surroundings and repair safely.

2. Adjustments



To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification.
Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts



Use grease and adhesives that are equal to the specified substance.
Make sure the proper amount is applied.

4. Cleaning



For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws



To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

A

CONTENTS

SAFETY INFORMATION2

1. SPECIFICATIONS5

2. EXPLODED VIEWS AND PARTS LIST6

 2.1 PACKING6

 2.2 EXTERIOR8

3. SCHEMATIC DIAGRAM10

 3.1 SCHEMATIC DIAGRAM (GUIDE PAGE)10

4. PCB CONNECTION DIAGRAM16

 4.1 AMP UNIT16

B

5. ELECTRICAL PARTS LIST20

6. ADJUSTMENT24

7. GENERAL INFORMATION25

 7.1 DIAGNOSIS25

 7.1.1 DISASSEMBLY25

 7.1.2 CONNECTOR FUNCTION DESCRIPTION26

8. OPERATIONS27

C

D

E

F

1. SPECIFICATIONS

Power source	14.4 V DC (10.8 — 15.1 V allowable)
Grounding system	Negative type
Backup current	3 mA or less
Current consumption	70 A (at continuous power, 4 Ω)
Average current drawn*	10.6 A (4 Ω for one channel) 15.6 A (2 Ω for one channel)
Fuse	150 A
Dimensions	300 (W) \times 64 (H) \times 330 (D) mm
Weight	7.3 kg (Leads for wiring not included)
Maximum power output	1,500 W \times 1 (4 Ω) / 3,000 W \times 1 (2 Ω)
Continuous power output (EW)	1,100 W \times 1 (4 Ω) / 1,950 W \times 1 (2 Ω) (DIN45324, +B=14.4 V)
Continuous power output (UC)	750 W \times 1 (at 14.4 V, 4 Ω , 20 — 240 Hz 1.0% THD) 1,500 W \times 1 (at 14.4 V, 2 Ω , 20 — 240 Hz 2.0% THD)
Load impedance	4 Ω (2 — 8 Ω allowable), (Ex. Bridge 4 — 16 Ω)
Frequency response	10 — 240 Hz (+0 dB, -1 dB)
S/N ratio	90 dB (IEC-A network)
Distortion	0.05 % (50 W, 100 Hz)
Low pass filter	Cut off frequency: 40 — 240 Hz Cut off slope: -18, -24 dB/oct
Subsonic filter (HPF)	Frequency: 20 Hz Slope: -18 dB
Bass boost	Level: 0 — 12 dB Frequency: 40 — 120 Hz
Phase control	SYNC, SYNC INV
Gain control	200 mV — 6.5 V
Maximum input level / impedance	RCA: 6.5 V / 22 k Ω

(UC model)

Power output	750 W RMS \times 1 channel (4 Ω and \leq 1 % THD+N) 1500 W RMS \times 1 channel (2 Ω and \leq 1 % THD+N, 240 Hz)
S/N ratio	60 dBA (Reference: 1 W into 4 Ω)



Note:

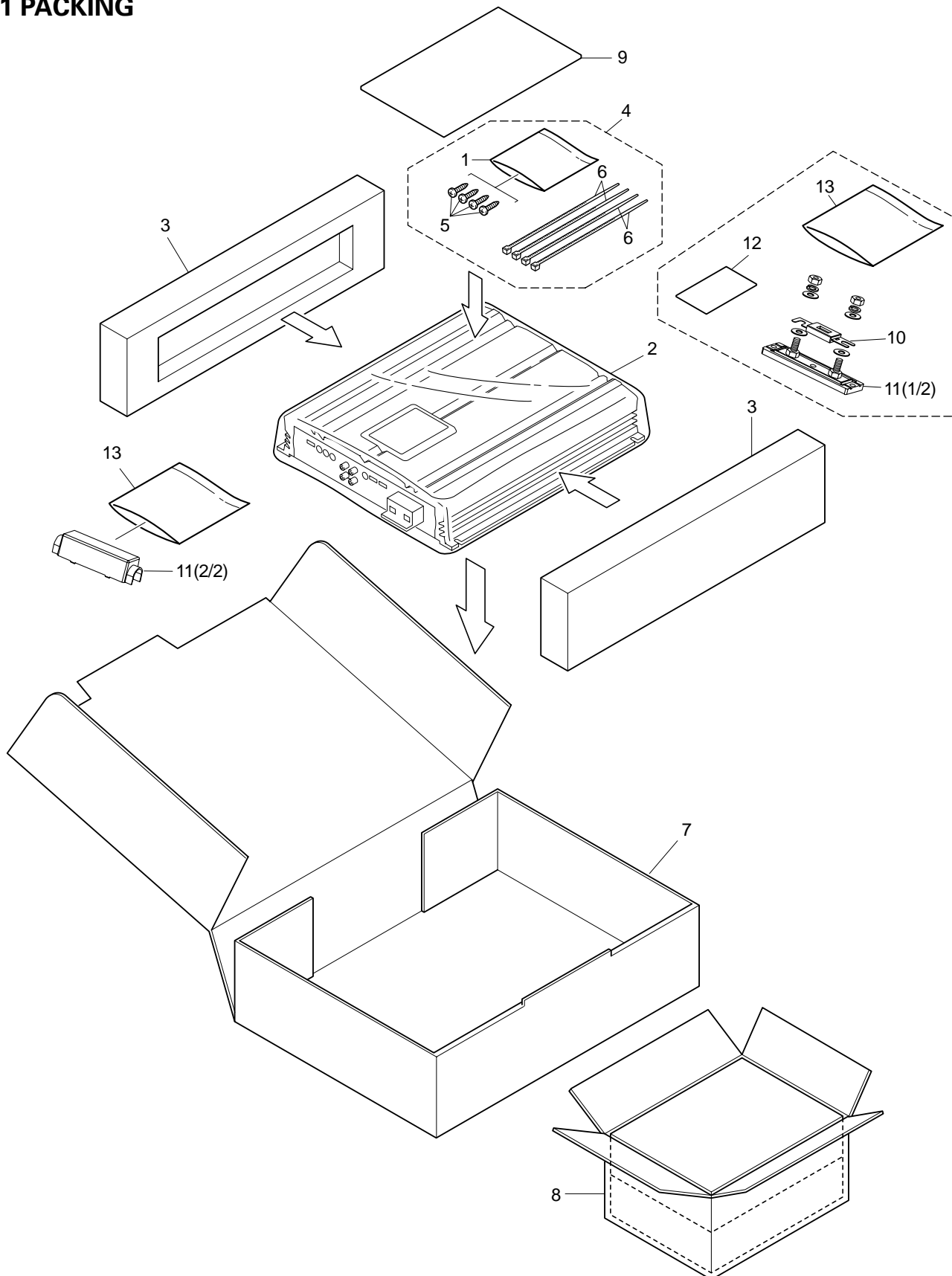
- Specifications and the design are subject to possible modification without notice due to improvements.

*Average current drawn

- The average current drawn is nearly the maximum current drawn by this unit when an audio signal is input. Use this value when working out total current drawn by multiple power amplifiers.

2. EXPLODED VIEWS AND PARTS LIST

2.1 PACKING



NOTE:

- Parts marked by “*” are generally unavailable because they are not in our Master Spare Parts List.
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part.
Therefore, when replacing, be sure to use parts of identical designation.
- Screws adjacent to ▽ mark on the product are used for disassembly.
- For the applying amount of lubricants or glue, follow the instructions in this manual.
(In the case of no amount instructions, apply as you think it appropriate.)

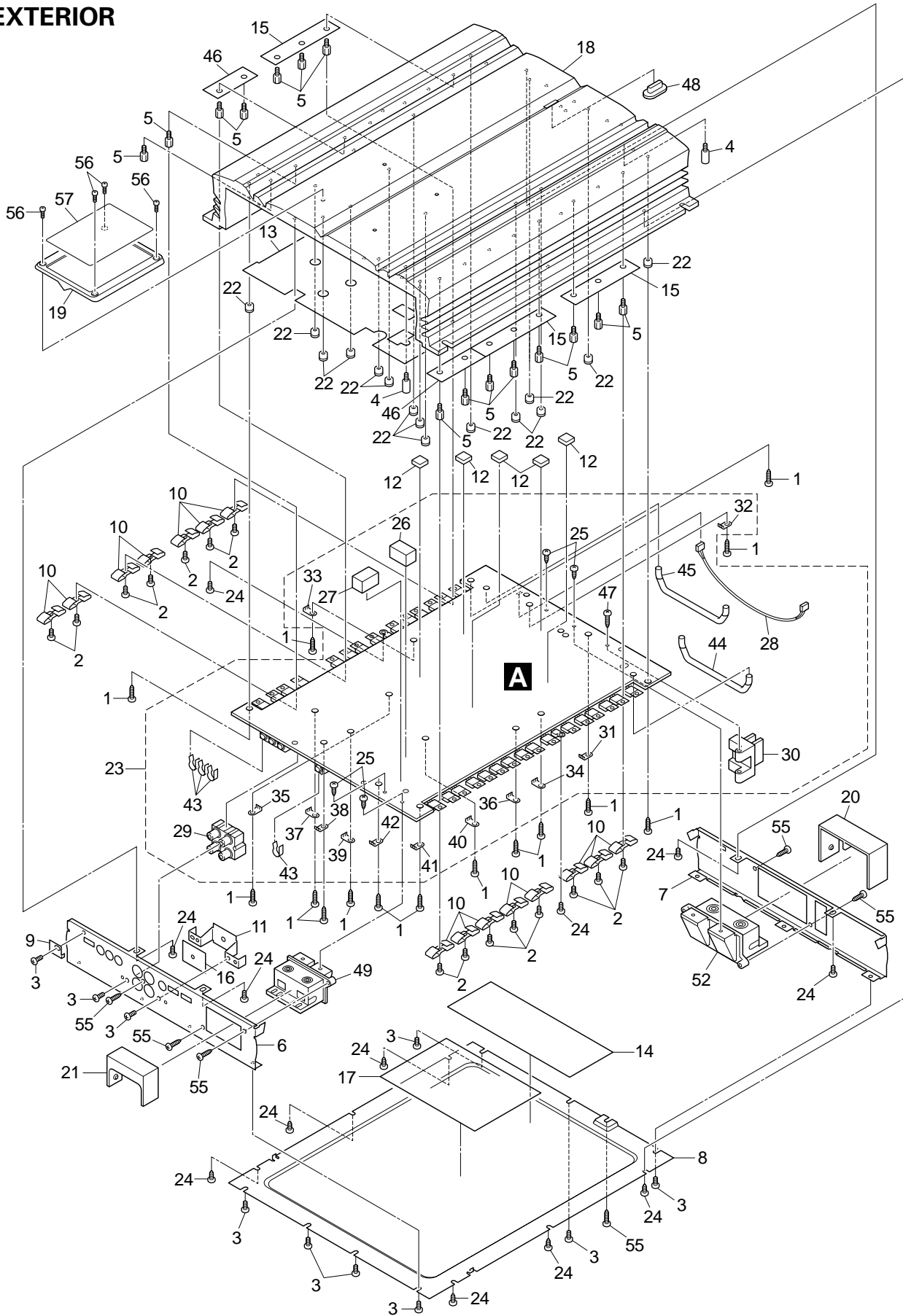
● PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Polyethylene Bag	HEG0011
	2	Polyethylene Bag	HEG0022
	3	Protector	HHP0268
	4	Screw Assy	HEA0072
	5	Screw	BYC40P180FZK
	6	Lock Tie	HNV0071
	7	Carton(EW)	HHG0452
		Carton(UC)	HHG0448
	8	Contain Box	HHL0448
*	9-1	Warranty Card(EW)	HRY1157
*	9-2	Card(UC)	ARY1048
	9-3	Owner's Manual(EW)	HRD0241
		Owner's Manual(UC)	HRD0240
⚠	10	Fuse (150A)	HEK1291
	11(1/2)	Fuse Holder (Base)	HKR1026
	11(2/2)	Fuse Holder (Cover)	HKR1026
	12	Install Card (EW)	HRP1298
		Install Card (UC)	HRP1297
	13	Polyethylene Bag	HEG0031

● Owner's Manual

Part No.	Language
HRD0240	English, French
HRD0241	English, Spanish, German, French, Italian, Dutch

2.2 EXTERIOR



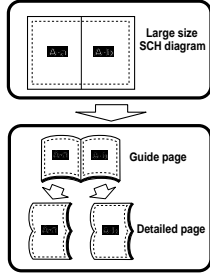
● EXTERIOR SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Screw	BBZ30P120FTC	50	
2	Screw	BMZ30P050FTC	51	
3	Screw	BSZ30P050FZK	52	Terminal Unit (CN901,902)	HXA0449
4	Screw	HBA0028	53	
5	Stud	HLA0022	54	
6	Panel	HNB0248	55	Screw	PPZ30P120FZK
7	Panel	HNB0249	56	Screw	SMZ20H060FNN
8	Case	HNB0250	* 57	Badge (EW)	HAM0039
9	Cover	HNB0272	*	Badge (UC)	HAM0034
10	Clip	HNC0189			
11	Holder	HNC0207			
12	Spacer	HNM0006			
13	Insulator	HNM0205			
14	Insulator	HNM0206			
15	Insulator	HNM0207			
16	Insulator	HNM0209			
17	Insulator	HNM0215			
18	Heat Sink	HNR0277			
19	Plate	HNS0122			
20	Cover	HNS0134			
21	Cover	HNS0135			
22	Spacer	HNV0016			
23	Amp Unit(EW)	HWH0218			
	Amp Unit(UC)	HWH0219			
24	Screw	BBZ30P060FTC			
25	Screw	BBZ30P060SAD			
26	Cushion(CN303)	CNM6825			
27	Cushion(CN304)	CNM6825			
28	Cord Assy	HDE0065			
29	Pin Jack(CN801)	HKB0004			
30	Terminal(CN903)	HKE1050			
31	Terminal(CN601)	HKF0001			
32	Terminal(CN602)	HKF0001			
33	Terminal(CN603)	HKF0001			
34	Terminal(CN604)	HKF0001			
35	Terminal(CN605)	HKF0001			
36	Terminal(CN606)	HKF0001			
37	Terminal(CN607)	HKF0001			
38	Terminal(CN608)	HKF0001			
39	Terminal(CN609)	HKF0001			
40	Terminal(CN610)	HKF0001			
41	Terminal(CN611)	HKF0001			
42	Terminal(CN612)	HKF0001			
43	Clip	HNC0054			
44	Buss Bar	HNC0200			
45	Buss Bar	HNC0201			
46	Insulator	HNM0208			
47	Screw	PPZ30P100SAD			
48	Light Pipe	HXA0426			
49	Terminal Unit (CN301,302)	HXA0448			

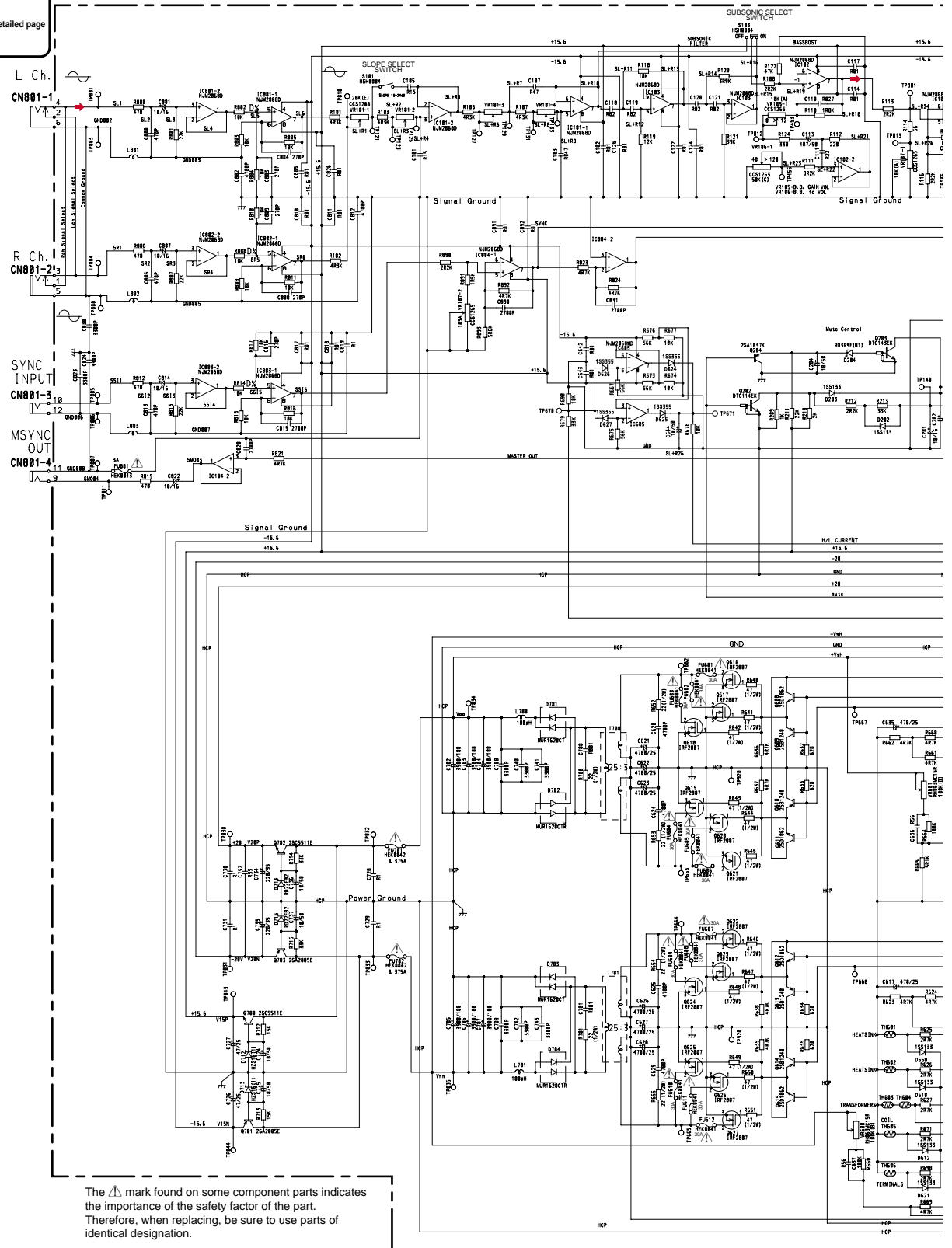
3. SCHEMATIC DIAGRAM

3.1 SCHEMATIC DIAGRAM (GUIDE PAGE)

Note: When ordering service parts, be sure to refer to "EXPLODED VIEWS AND PARTS LIST" or "ELECTRICAL PARTS LIST".



A-a



The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

A

A-b

A

B

C

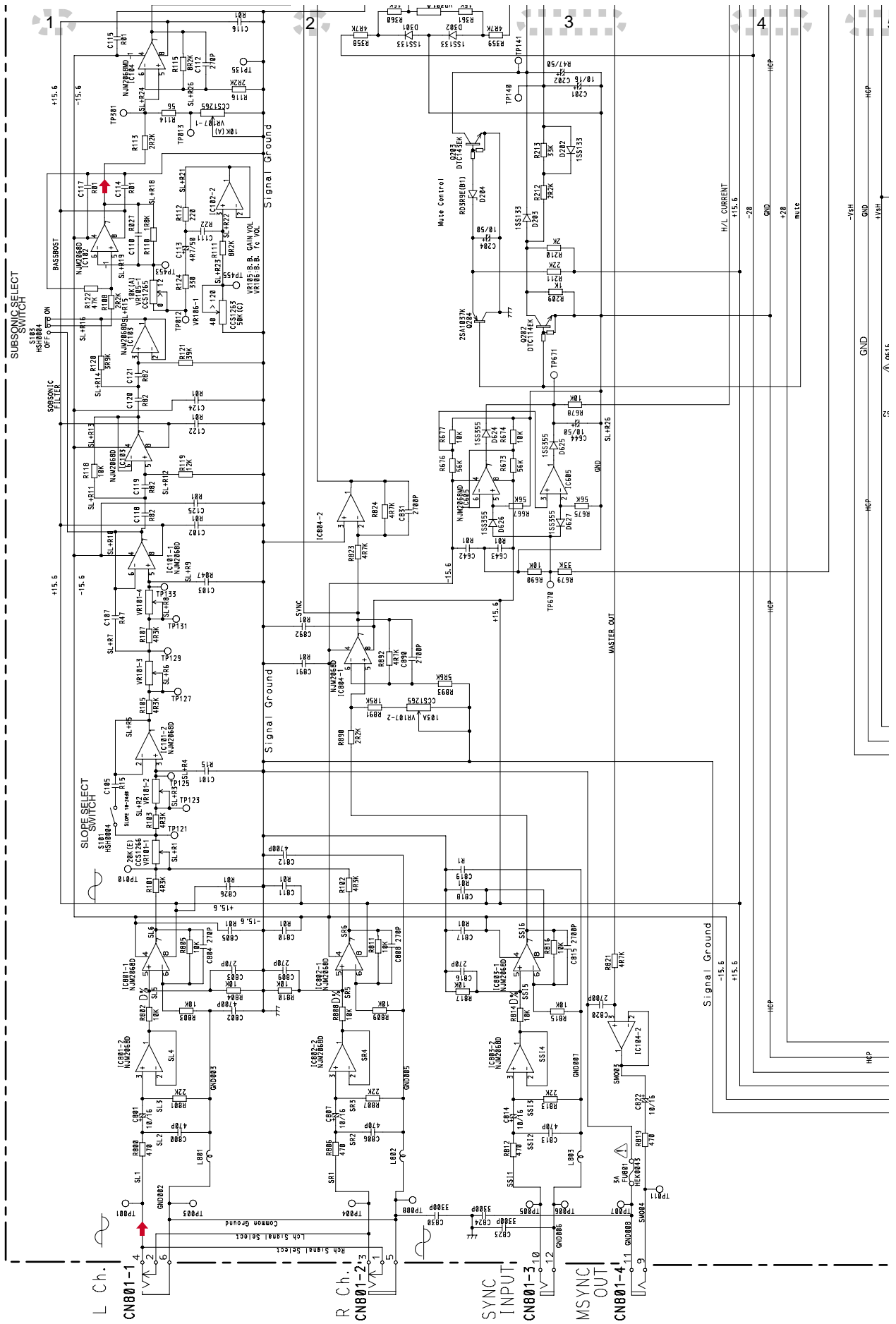
D

E

F

A-a A-b

A-a



A

B

C

D

E

F

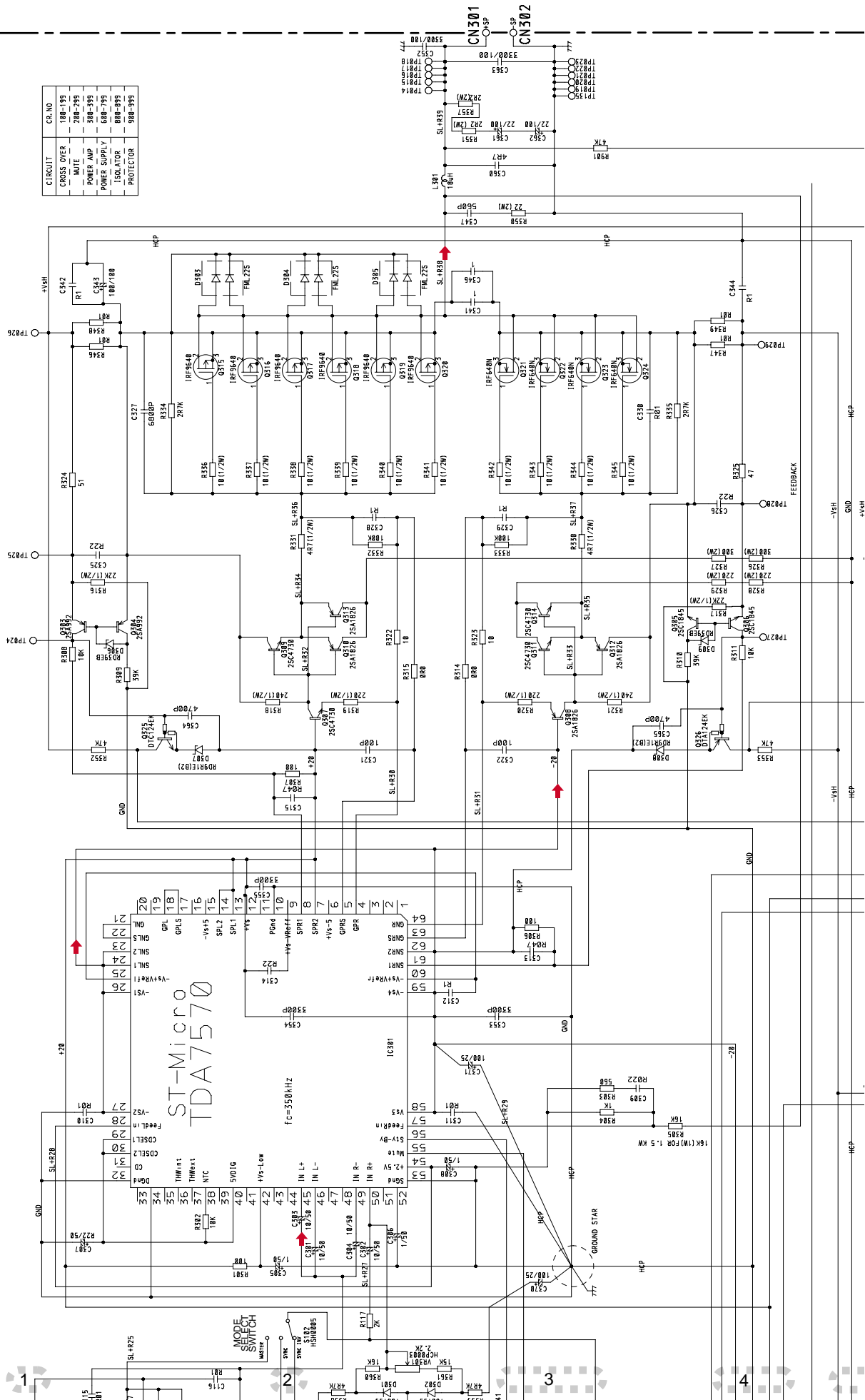
A

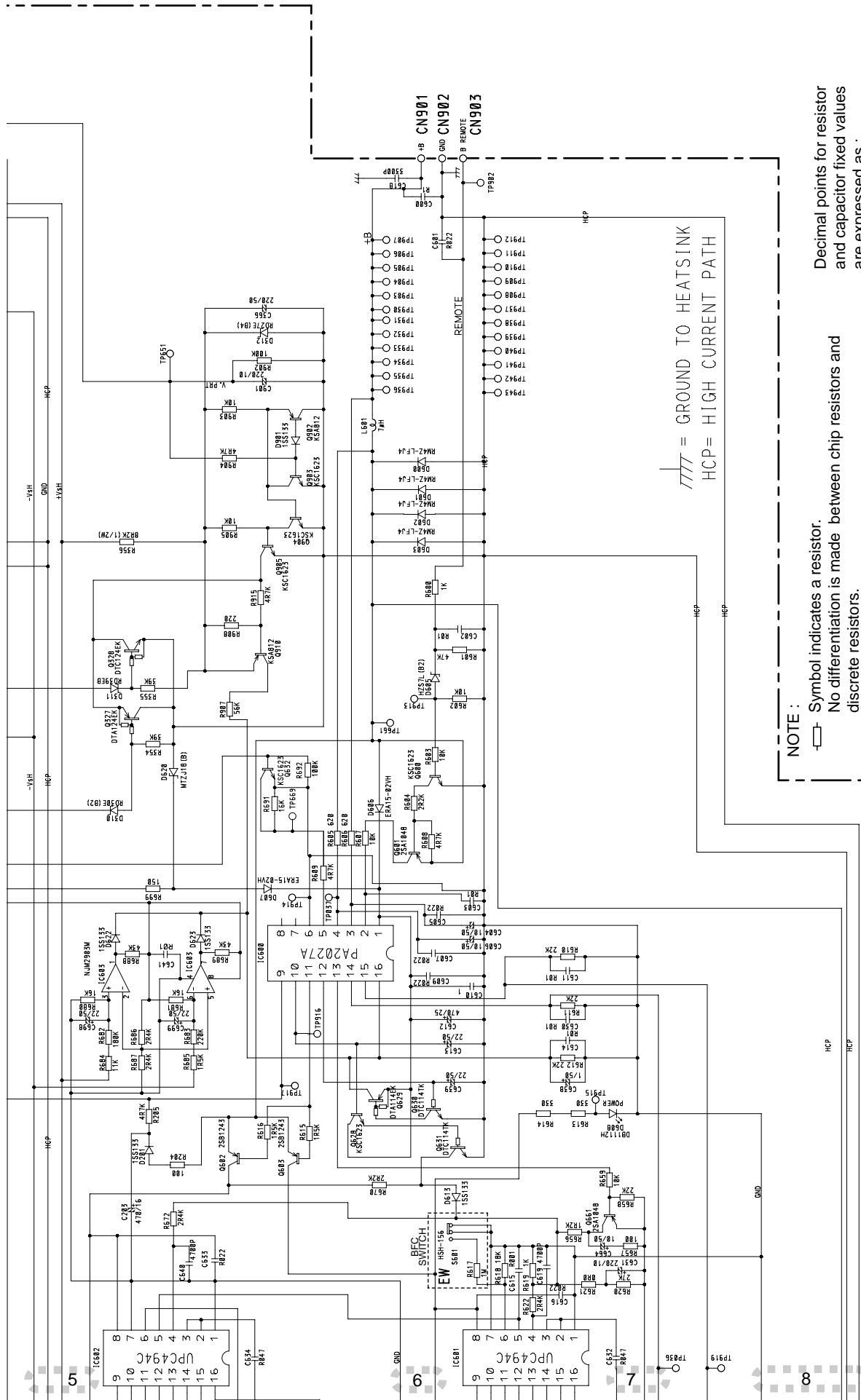
AMP UNIT

CIRCUIT	CR. NO
CROSS OVER	188-195
MUTE	286-295
POWER AMP	386-395
POWER SUPPLY	688-795
ISOLATOR	888-895
PROTECTOR	988-995

A-a A-b

A-b





NOTE :

- Symbol indicates a resistor.
No differentiation is made between chip resistors and discrete resistors.
- ⎓ Symbol indicates a capacitor.
No differentiation is made between chip capacitors and discrete capacitors.

Decimal points for resistor and capacitor fixed values are expressed as :
2.2 → 2R2
0.022 → R022

The Δ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

A-a	A-b
-----	-----

A-b

4. PCB CONNECTION DIAGRAM

4.1 AMP UNIT

A AMP UNIT

NOTE FOR PCB DIAGRAMS

1. The parts mounted on this PCB include all necessary parts for several destination.
For further information for respective destinations, be sure to check with the schematic diagram.

2. Viewpoint of PCB diagrams

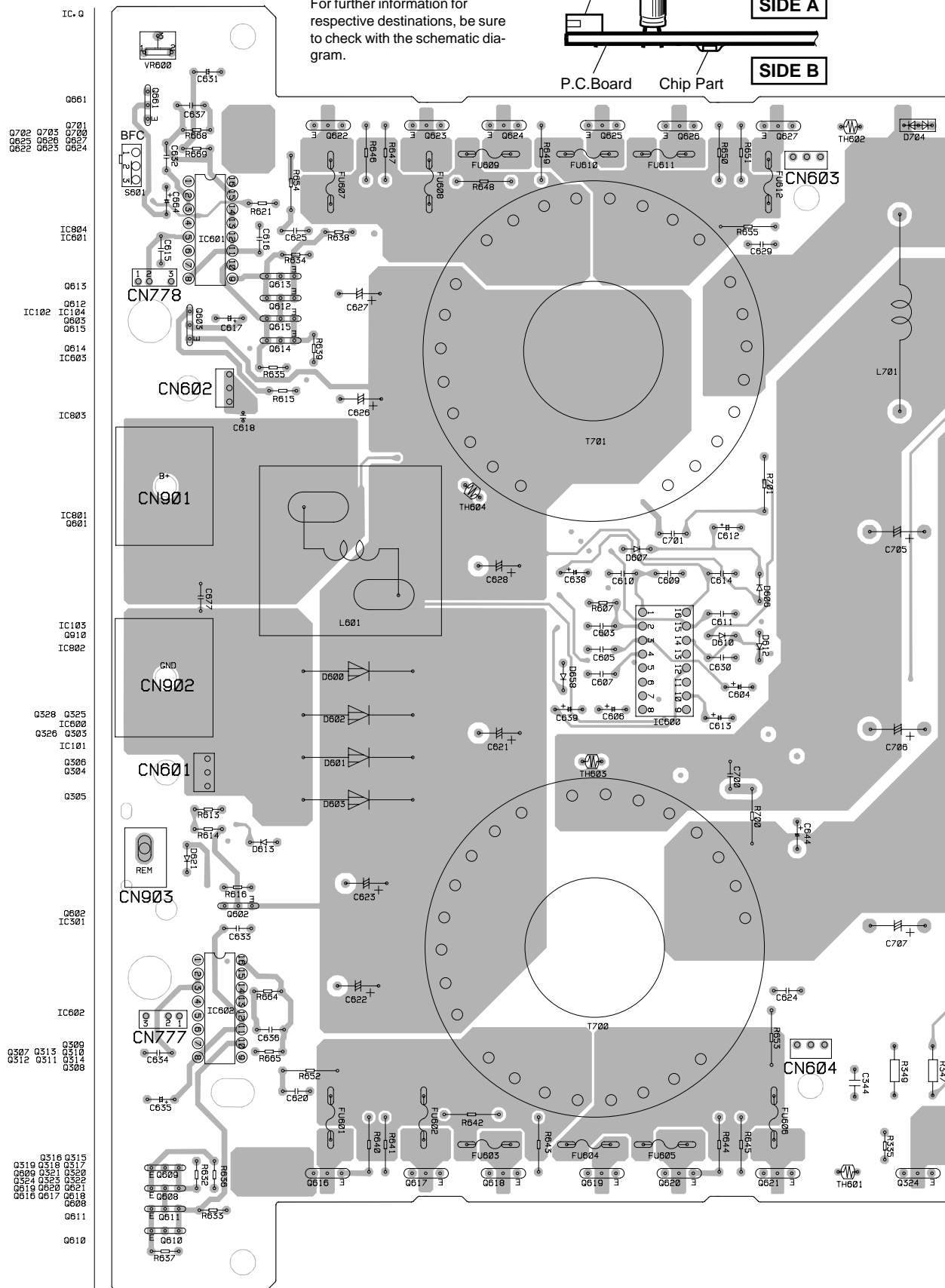
Connector Capacitor

P.C.Board C

Chip Part

SIDE A

SIDE B



PRS-D5000SPL/X1H/EW

SIDE A

A

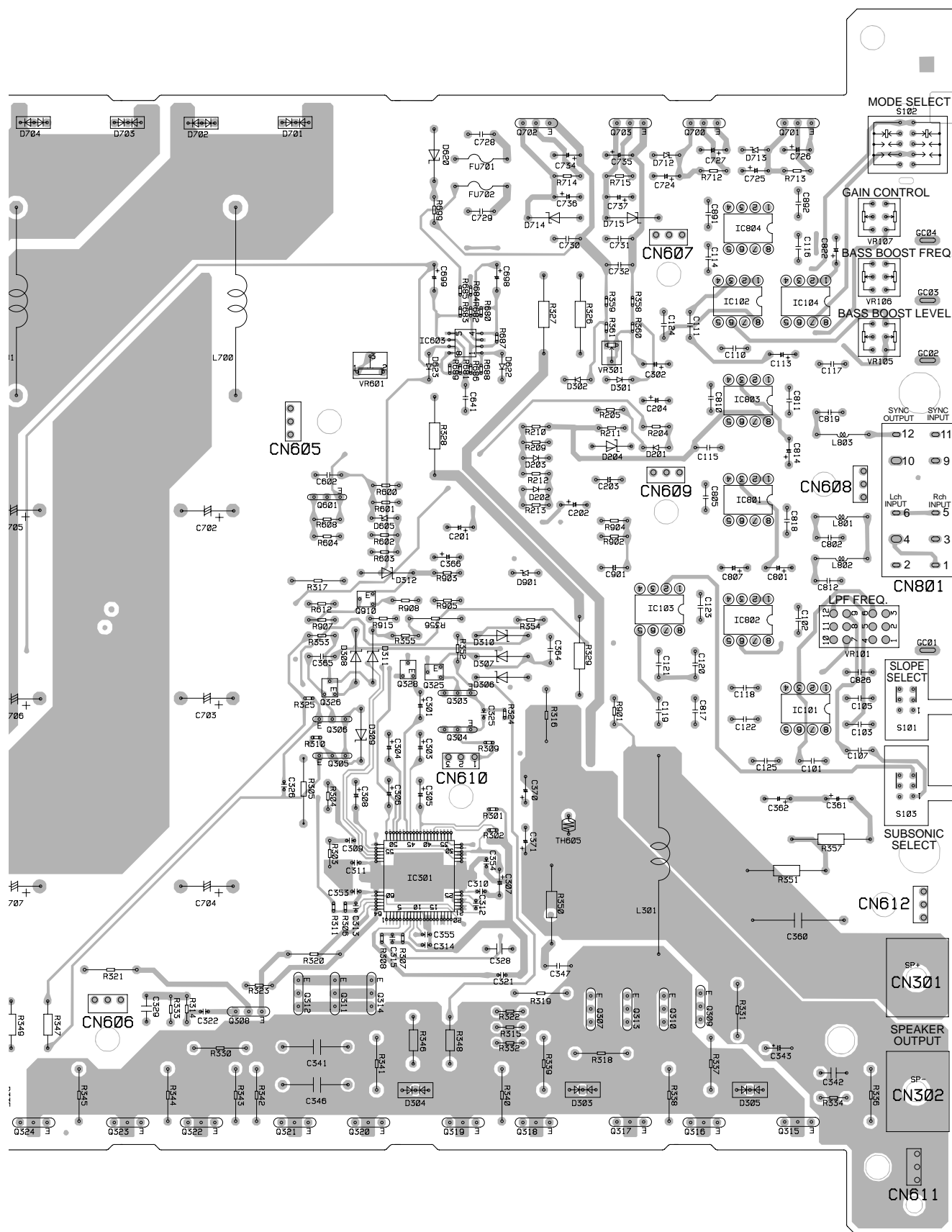
B

C

D

E

F



A

5. ELECTRICAL PARTS LIST

NOTE:

- Parts whose parts numbers are omitted are subject to being not supplied.
- The part numbers shown below indicate chip components.

Chip Resistor

RS1/○○○○○J, RS1/○○○○○J

Chip Capacitor (except for CQS.....)

CKS....., CCS....., CSZS.....

- The \triangle mark found on some component parts indicates the importance of the safety factor of the part.

Therefore, when replacing, be sure to use parts of identical designation.

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.
A Unit Number : HWH0218(EW)		Q 602 Transistor	2SB1243
Unit Number : HWH0219(UC)		Q 603 Transistor	2SB1243
Unit Name : Amp Unit		Q 608 Transistor	2SD1862
		Q 609 Transistor	2SB1240
		Q 610 Transistor	2SB1240
MISCELLANEOUS			
IC 101 IC	NJM2068D	Q 611 Transistor	2SD1862
IC 102 IC	NJM2068D	Q 612 Transistor	2SD1862
IC 103 IC	NJM2068D	Q 613 Transistor	2SB1240
IC 104 IC	NJM2068D	Q 614 Transistor	2SB1240
IC 301 IC	TDA7570	Q 615 Transistor	2SD1862
IC 600 IC	PA2027A	Q 616 FET	IRF2807
IC 601 IC	UPC494C	Q 617 FET	IRF2807
IC 602 IC	UPC494C	Q 618 FET	IRF2807
IC 603 IC	NJM2903M	Q 619 FET	IRF2807
IC 605 IC	NJM2068MD	Q 620 FET	IRF2807
IC 801 IC	NJM2068D	Q 621 FET	IRF2807
IC 802 IC	NJM2068D	Q 622 FET	IRF2807
IC 803 IC	NJM2068D	Q 623 FET	IRF2807
IC 804 IC	NJM2068D	Q 624 FET	IRF2807
Q 202 Transistor	DTC114EK	Q 625 FET	IRF2807
Q 203 Transistor	DTC143EK	Q 626 FET	IRF2807
Q 204 Transistor	2SA1037K	Q 627 FET	IRF2807
Q 303 Transistor	2SA992	Q 628 Transistor	KSC1623
Q 304 Transistor	2SA992	Q 629 Transistor	DTA114EK
Q 305 Transistor	2SC1845	Q 630 Transistor	DTC114TK
Q 306 Transistor	2SC1845	Q 631 Transistor	DTC114TK
Q 307 Transistor	2SC4730	Q 632 Transistor	KSC1623
Q 308 Transistor	2SA1826	Q 661 Transistor	2SA1048
Q 309 Transistor	2SC4730	Q 700 Transistor	2SC5511E
Q 310 Transistor	2SA1826	Q 701 Transistor	2SA2005E
Q 311 Transistor	2SC4730	Q 702 Transistor	2SC5511E
Q 312 Transistor	2SA1826	Q 703 Transistor	2SA2005E
Q 313 Transistor	2SA1826	Q 902 Transistor	KSA812
Q 314 Transistor	2SC4730	Q 903 Transistor	KSC1623
Q 315 Transistor	IRF9640	Q 904 Transistor	KSC1623
Q 316 Transistor	IRF9640	Q 905 Transistor	KSC1623
Q 317 Transistor	IRF9640	Q 910 Transistor	KSA812
Q 318 Transistor	IRF9640	D 201 Diode	1SS133
Q 319 Transistor	IRF9640	D 202 Diode	1SS133
Q 320 Transistor	IRF9640	D 203 Diode	1SS133
Q 321 Transistor	IRF640N	D 204 Diode	RD3R9E(B1)
Q 322 Transistor	IRF640N	D 301 Diode	1SS133
Q 323 Transistor	IRF640N	D 302 Diode	1SS133
Q 324 Transistor	IRF640N	D 303 Diode	FML22S
Q 325 Transistor	DTC124EK	D 304 Diode	FML22S
Q 326 Transistor	DTA124EK	D 305 Diode	FML22S
Q 327 Transistor	DTA124EK	D 306 Diode	RD39EB
Q 328 Transistor	DTC124EK	D 307 Diode	RD9R1E(B2)
Q 600 Transistor	KSC1623	D 308 Diode	RD9R1E(B2)
Q 601 Transistor	2SA1048	D 309 Diode	RD39EB

====Circuit Symbol and No.==Part Name			Part No.	====Circuit Symbol and No.==Part Name			Part No.	A
D	310	Diode	RD30E(B2)	△ FU	604	Fuse 30A	HEK0041	
D	311	Diode	RD39EB	△ FU	605	Fuse 30A	HEK0041	
D	312	Diode	RD27E(B4)	△ FU	606	Fuse 30A	HEK0041	
D	600	Diode	RM4Z-LFJ4	△ FU	607	Fuse 30A	HEK0041	
D	601	Diode	RM4Z-LFJ4	△ FU	608	Fuse 30A	HEK0041	
D	602	Diode	RM4Z-LFJ4	△ FU	609	Fuse 30A	HEK0041	
D	603	Diode	RM4Z-LFJ4	△ FU	610	Fuse 30A	HEK0041	
D	605	Diode	HZS7L(B2)	△ FU	611	Fuse 30A	HEK0041	
D	606	Diode	ERA15-02VH	△ FU	612	Fuse 30A	HEK0041	
D	607	Diode	ERA15-02VH	△ FU	701	Fuse 0.375A	HEK0042	
D	608	LED	DB1112H	△ FU	702	Fuse 0.375A	HEK0042	
D	610	Diode	1SS133	△ FU	801	Fuse 3A	HEK0043	
D	612	Diode	1SS133					
D	613	Diode	1SS133					
D	620	Diode	MTZJ18(B)					
				RESISTORS				B
D	621	Diode	1SS133	R	101		RS1/16S432J	
D	622	Diode	1SS133	R	102		RS1/16S432J	
D	623	Diode	1SS133	R	103		RS1/16S432J	
D	624	Diode	1SS355	R	105		RS1/16S432J	
D	625	Diode	1SS355	R	107		RS1/16S432J	
D	626	Diode	1SS355	R	108		RS1/16S222J	
D	627	Diode	1SS355	R	110		RS1/16S182J	
D	658	Diode	1SS133	R	111		RS1/16S822J	
D	701	Diode	MUR1620CT	R	112		RS1/16S221J	
D	702	Diode	MUR1620CTR	R	113		RS1/16S222J	
D	703	Diode	MUR1620CT	R	114		RS1/16S560J	
D	704	Diode	MUR1620CTR	R	115		RS1/16S822J	
D	712	Diode	HZS16L(1)	R	116		RS1/16S222J	
D	713	Diode	HZS16L(1)	R	117		RS1/16S202J	
D	714	Diode	RD22EB2	R	118		RS1/16S103J	
D	715	Diode	RD22EB2	R	119		RS1/16S123J	
D	901	Diode	1SS133	R	120		RS1/16S392J	
L	301	Coil	HTH0016	R	121		RS1/16S393J	
L	601	Choke Coil 7μH	HTH0014	R	122		RS1/16S473J	
L	700	Choke Coil 100μH	HTH0015	R	124		RS1/16S331J	
L	701	Choke Coil 100μH	HTH0015	R	204		RD1/4PU101J	
L	801	Ferri-Inductor	CTF1007	R	205		RD1/4PU472J	
L	802	Ferri-Inductor	CTF1007	R	209		RD1/4PU102J	
L	803	Ferri-Inductor	CTF1007	R	210		RD1/4PU202J	
T	700	Transformer	HTT0031	R	211		RD1/4PU223J	
T	701	Transformer	HTT0031	R	212		RD1/4PU222J	
TH	601	Thermistor	HGX0002	R	213		RD1/4PU333J	
TH	602	Thermistor	HGX0002	R	301		RS1/16S101J	
TH	603	Thermistor	HGX0001	R	302		RS1/16S103J	
TH	604	Thermistor	HGX0001	R	303		RD1/4PU561J	
TH	605	Thermistor	HGX0001	R	304		RD1/4PU102J	
TH	606	Thermistor	HGX0004	R	305		RS1PMF163J	
S	101	Switch (SLOPE SELECT)	HSH0004	R	306		RS1/16S101J	
S	102	Switch (MODE SELECT)	HSH0005	R	307		RS1/16S101J	
S	103	Switch (SUBSONIC SELECT)	HSH0004	R	308		RS1/16S103J	
S	601	Switch (BFC)(EW)	HSH-156	R	309		RS1/16S393J	
VR	101	Variable Resistor 20kΩ(E) (LPF FREQ.)	CCS1266	R	310		RS1/16S393J	
VR	105	Variable Resistor 10kΩ(A) (BASS BOOST LEVEL)	CCS1265	R	311		RS1/16S103J	
				R	314		RD1/4PU0R0J	
				R	315		RD1/4PU0R0J	
VR	106	Variable Resistor 50kΩ(C) (BASS BOOST FREQ.)	CCS1263	R	316		RS1/2PMF223J	
VR	107	Variable Resistor 10kΩ(A) (GAIN CONTROL)	CCS1265	R	317		RS1/2PMF223J	
VR	301	Semi-fixedr 2.2kΩ	HCP0003	R	318		RS1/2PMF241J	
				R	319		RS1/2PMF221J	
				R	320		RS1/2PMF221J	
VR	600	Semi-fixed 100kΩ(B)	RH063MC15R	R	321		RS1/2PMF241J	
VR	601	Semi-fixed 100kΩ(B)	RH063MC15R	R	322		RD1/4PU100J	
△ FU	601	Fuse 30A	HEK0041	R	323		RD1/4PU100J	
△ FU	602	Fuse 30A	HEK0041	R	324		RS1/16S510J	
△ FU	603	Fuse 30A	HEK0041	R	325		RS1/16S470J	
				R	326		RS2LMF301J	
				R	327		RS2LMF301J	
				R	328		RS2LMF221J	
				R	329		RS2LMF221J	
				R	330		RS1/2PMF4R7J	
								F

A	====Circuit Symbol and No.==Part Name		Part No.	====Circuit Symbol and No.==Part Name		Part No.
	---	-----		---	-----	
	R	331	RS1/2PMF4R7J	R	638	RD1/4PU472J
	R	332	RD1/4PU104J	R	639	RD1/4PU472J
	R	333	RD1/4PU104J	R	640	RS1/2PMF470J
	R	334	RD1/4PU272J	R	641	RS1/2PMF470J
	R	335	RD1/4PU272J	R	642	RS1/2PMF470J
	R	336	RS1/2PMF100J	R	643	RS1/2PMF470J
	R	337	RS1/2PMF100J	R	644	RS1/2PMF470J
	R	338	RS1/2PMF100J	R	645	RS1/2PMF470J
	R	339	RS1/2PMF100J	R	646	RS1/2PMF470J
	R	340	RS1/2PMF100J	R	647	RS1/2PMF470J
B	R	341	RS1/2PMF100J	R	648	RS1/2PMF470J
	R	342	RS1/2PMF100J	R	649	RS1/2PMF470J
	R	343	RS1/2PMF100J	R	650	RS1/2PMF470J
	R	344	RS1/2PMF100J	R	651	RS1/2PMF470J
	R	345	RS1/2PMF100J	R	652	RS1/2PMF220J
	R	346	HCN0011	R	653	RS1/2PMF220J
	R	347	HCN0011	R	654	RS1/2PMF220J
	R	348	HCN0011	R	655	RS1/2PMF220J
	R	349	HCN0011	R	656	RS1/16S122J
	R	350	RS2PMF220J	R	657	RS1/16S101J
	R	351	RS2LMF2R2J	R	658	RS1/16S223J
	R	352	RD1/4PU473J	R	659	RS1/16S103J
	R	353	RD1/4PU473J	R	660	RS1/16S472J
	R	354	RD1/4PU393J	R	661	RS1/16S472J
	R	355	RD1/4PU393J	R	662	RS1/16S472J
C	R	356	RS1/2PMF822J	R	664	RD1/4PU104J
	R	357	RS2LMF2R2J	R	665	RD1/4PU512J
	R	358	RS1/16S472J	R	667	RS1/16S563J
	R	359	RS1/16S472J	R	668	RD1/4PU104J
	R	360	RS1/16S163J	R	669	RD1/4PU472J
	R	361	RS1/16S153J	R	670	RS1/16S222J
	R	600	RD1/4PU102J	R	671	RS1/16S272J
	R	601	RD1/4PU473J	R	672	RS1/16S242J
	R	602	RD1/4PU103J	R	673	RS1/16S563J
	R	603	RD1/4PU103J	R	674	RS1/16S103J
D	R	604	RD1/4PU222J	R	675	RS1/16S563J
	R	605	RS1/16S621J	R	676	RS1/16S563J
	R	606	RS1/16S621J	R	677	RS1/16S103J
	R	607	RD1/4PU103J	R	679	RS1/16S333J
	R	608	RD1/4PU472J	R	678	RS1/16S103J
	R	609	RS1/16S472J	R	680	RS1/16S1602D
	R	610	RS1/16S223J	R	681	RS1/16S1602D
	R	611	RS1/16S223J	R	682	RS1/16S1803D
	R	612	RD1/4PU223J	R	683	RS1/16S2203D
	R	613	RD1/4PU331J	R	684	RS1/16S1102D
	R	614	RD1/4PU331J	R	685	RS1/16S1501D
	R	615	RD1/4PU152J	R	686	RS1/16S2401D
	R	616	RD1/4PU152J	R	687	RS1/16S2401D
	R	617	RS1/16S105J	R	688	RS1/16S433J
	R	618	RS1/16S183J	R	689	RS1/16S433J
E	R	619	RS1/16S102J	R	690	RS1/16S103J
	R	620	RS1/16S273J	R	691	RS1/16S163J
	R	621	RD1/4PU0R0J	R	692	RS1/16S104J
	R	622	RS1/16S242J	R	698	RS1/16S272J
	R	623	RS1/16S472J	R	699	RD1/4PU151J
	R	624	RS1/16S472J	R	700	RS1/2PMF220J
	R	625	RS1/16S272J	R	701	RS1/2PMF220J
	R	626	RS1/16S272J	R	712	RD1/4PU153J
	R	627	RS1/16S272J	R	713	RD1/4PU153J
	R	632	RD1/4PU621J	R	714	RD1/4PU333J
	R	633	RD1/4PU621J	R	715	RD1/4PU333J
	R	634	RD1/4PU621J	R	800	RS1/16S471J
	R	635	RD1/4PU621J	R	801	RS1/16S223J
	R	636	RD1/4PU472J	R	802	RN1/10SE1002D
	R	637	RD1/4PU472J	R	803	RN1/10SE1002D
F						

====Circuit Symbol and No.====Part Name	Part No.	====Circuit Symbol and No.====Part Name	Part No.	
R 804	RN1/10SE1002D	C 311	CKSRYB103K50	A
R 805	RN1/10SE1002D	C 312	CKSRYB104K25	
R 806	RS1/16S471J	C 313	CKSRYB473K50	
R 807	RS1/16S223J	C 314	CKSRYB224K16	
R 808	RN1/10SE1002D	C 315	CKSRYB473K50	
R 809	RN1/10SE1002D	C 321	CCSRCH101J50	
R 810	RN1/10SE1002D	C 322	CCSRCH101J50	
R 811	RN1/10SE1002D	C 325	CKSRYB224K16	
R 812	RS1/16S471J	C 326	CKSRYB224K16	
R 813	RS1/16S223J	C 327	CKSRYB682K50	
R 814	RN1/10SE1002D	C 328	HCE0003	
R 815	RN1/10SE1002D	C 329	HCE0003	
R 816	RN1/10SE1002D	C 330	CKSRYB103K50	B
R 817	RN1/10SE1002D	C 341	HCE0004	
R 819	RS1/16S471J	C 342	HCE0003	
R 821	RS1/16S472J	C 343	HCH0026	
R 823	RS1/16S472J	C 344	HCE0003	
R 824	RS1/16S472J	C 346	HCE0004	
R 890	RS1/16S222J	C 347	HCE0002	
R 891	RS1/16S152J	C 352	HCH0029	
R 892	RS1/16S472J	C 353	CKSRYB332K50	
R 893	RS1/16S562J	C 354	CKSRYB332K50	
R 901	RD1/4PU473J	C 355	CKSRYB332K50	
R 902	RD1/4PU104J	C 360	HCE0005	
R 903	RD1/4PU103J	C 361	HCH0028	
R 904	RD1/4PU472J	C 362	HCH0028	C
R 905	RD1/4PU103J	C 363	HCH0029	
R 907	RD1/4PU563J	C 364	CQMA472J50	
R 908	RD1/4PU221J	C 365	CQMA472J50	
R 915	RD1/4PU472J	C 366	CEAT220M50	
CAPACITORS		C 370	CEAT101M25	
C 101	CFTNA154J50	C 371	CEAT101M25	
C 102	CFTNA103J50	C 600	CKSRYB104K25	
C 103	CFTNA473J50	C 601	CKSRYB223K50	
C 105	CFTNA154J50	C 602	CFTNA103J50	
C 107	CFTNA474J50	C 603	CFTNA103J50	
C 110	CFTNA273J50	C 604	CEAT100M50	
C 111	CFTNA224J50	C 605	CFTNA223J50	
C 112	CCSRCH271J50	C 606	CEAT100M50	D
C 113	CEAT4R7M50	C 607	CFTNA223J50	
C 114	CFTNA103J50	C 609	CFTNA223J50	
C 115	CFTNA103J50	C 610	CFTNA105J50	
C 116	CFTNA103J50	C 611	CFTNA103J50	
C 117	CFTNA103J50	C 612	CEAT471M25	
C 118	CFTNA824J50	C 613	CEAT220M50	
C 119	CFTNA824J50	C 614	CFTNA103J50	
C 120	CFTNA824J50	C 615	CQMA102J50	
C 121	CFTNA824J50	C 616	CFTNA223J50	
C 122	CFTNA103J50	C 617	CEAT471M25	
C 123	CFTNA103J50	C 618	CKSRYB332K50	
C 124	CFTNA103J50	C 619	CKSRYB472K50	
C 125	CFTNA103J50	C 620	CQMA472J50	
C 201	CEAT100M16	C 621	HCH0022	E
C 202	CEATR47M50	C 622	HCH0022	
C 203	CEAT471M16	C 623	HCH0022	
C 204	CEAT100M50	C 624	CQMA472J50	
C 301	CEAT100M50	C 625	CQMA472J50	
C 302	CEAT100M50	C 626	HCH0022	
C 303	CEAT100M50	C 627	HCH0022	
C 304	CEAT100M50	C 628	HCH0022	
C 305	CEAT1R0M50	C 629	CQMA472J50	
C 306	CEAT1R0M50	C 630	CFTNA103J50	
C 307	CEATR22M50	C 631	HCH0012	
C 308	CEAT1R0M50	C 632	CFTNA473J50	
C 309	CKSRYB223K25	C 633	CFTNA223J50	
C 310	CKSRYB103K50			F

A	====Circuit Symbol and No.==Part Name		Part No.	====Circuit Symbol and No.==Part Name		Part No.
	---	-----		---	-----	
C	634		CFTNA473J50	C 743	3300pF	HCH0029
	635		CEAT471M25	C 800		CKSRYB471K50
	636		CFTNA564J50	C 801		CEAT100M16
	637		CFTNA564J50	C 802		CQMA472J50
	638		CEAT1R0M50	C 803		CCSRCH271J50
C	639		CEAT220M50	C 804		CCSRCH271J50
	640		CKSRYB472K50	C 805		CFTNA103J50
	641		CFTNA103J50	C 806		CKSRYB471K50
	642		CKSRYB103K50	C 807		CEAT100M16
	643		CKSRYB103K50	C 808		CCSRCH271J50
C	644		CEAT100M50	C 809		CCSRCH271J50
	664		CEAT100M50	C 810		CFTNA103J50
	698		CEAT220M50	C 811		CFTNA103J50
	699		CEAT220M50	C 812		CQMA472J50
	700		CQMA102K2E	C 813		CKSRYB471K50
C	701		CQMA102K2E	C 814		CEAT100M16
	702	3900μF/100V	HCH0023	C 815		CKSRYB272K50
	703	3900μF/100V	HCH0023	C 816		CCSRCH271J50
	704	3900μF/100V	HCH0023	C 817		CFTNA103J50
	705	3900μF/100V	HCH0023	C 818		CFTNA103J50
C	706	3900μF/100V	HCH0023	C 819		CFTNA104J50
	707	3900μF/100V	HCH0023	C 820		CKSRYB272K50
	708	3300p	HCH0029	C 822		CEAT100M16
	709	3300p	HCH0029	C 823		CKSRYB332K50
	724		CEAT100M50	C 824		CKSRYB332K50
C	725		CEAT100M50	C 826		CFTNA103J50
	726		CEAT470M25	C 830		CKSRYB332K50
	727		CEAT470M25	C 831		CKSRYB272K50
	728	0.1μF	HCE0003	C 890		CKSRYB272K50
	729	0.1μF	HCE0003	C 891		CFTNA103J50
C	730		CFTNA104J50	C 892		CFTNA103J50
	731		CFTNA104J50	C 901	220μF/10V	HCH0012
	732		CFTNA334J50			
	734	220μF/35V	HCH0032			
	735	220μF/35V	HCH0032			
C	736		CEAT100M50			
	737		CEAT100M50			
	740	3300pF	HCH0029			
	741	3300pF	HCH0029			
	742	3300pF	HCH0029			

6. ADJUSTMENT

There is no information to be shown in this chapter.

7. GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 DISASSEMBLY

● Removing the Case (Fig.1)

- 1** Remove the seven screws.
- 2** Remove the screw.
- 3** Remove the six screws and then remove the Case.

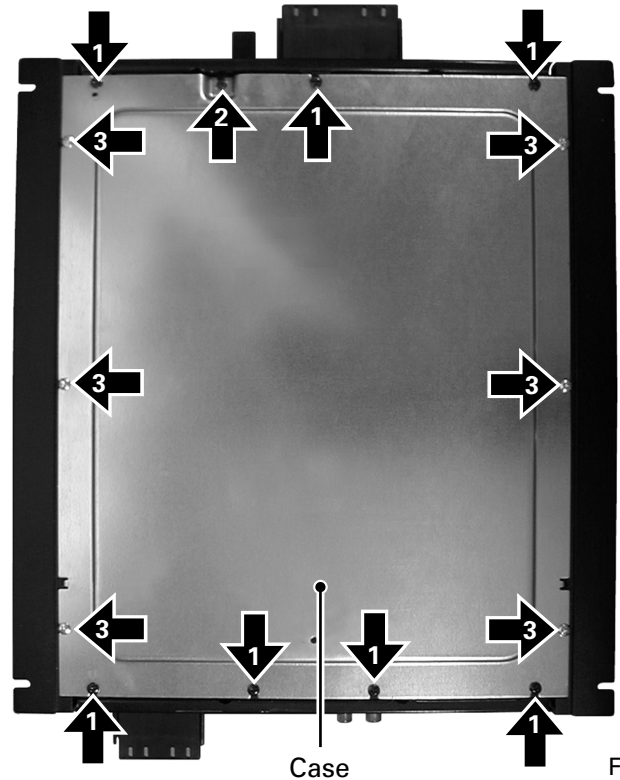


Fig.1

● Removing the Amp Unit (Fig.2)

- 1** Remove the two screws.
- 2** Remove the screw.
- 3** Remove the five screws and then remove the Panel.
- 4** Remove the two screws.
- 5** Remove the two screws and then remove the Panel.
- 6** Remove the seventeen screws.
- 7** Remove the fifteen screws and then remove the Amp Unit.

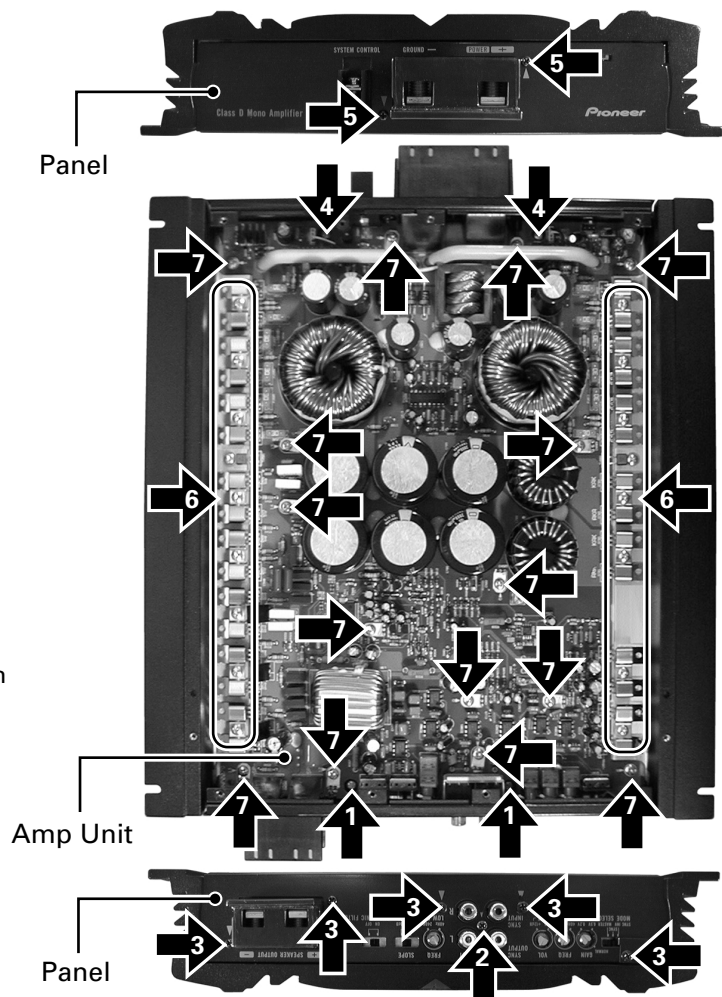


Fig.2

A



8. OPERATIONS

Gain Control

If the sound level is too low, even when the volume of the car stereo used along with this power amplifier is turned up, turn gain control on the front of the power amplifier clockwise. If the sound distorts when the volume is turned up, turn the gain control counter-clockwise.

- When using with an RCA equipped car stereo (standard output of 500 mV), set to the **NORMAL** position. When using with an RCA equipped Pioneer car stereo with max. output of 4 V or more, adjust level to match the car stereo output level.
- For synced amplifier's gain control, see the "Setting the Gain for synced amplifier" section.

Bass Boost Frequency Control

You can select a bass boost frequency from 40 to 120 Hz with the bass boost control.

Cut Off Frequency Control for LPF

You can select a cut off frequency from 40 to 240 Hz.

BFC (Beat Frequency Control) Switch

If you hear a beat while listening to an MW/LW broadcast with your car stereo, change the BFC switch using a small standard tip screwdriver.

MODE SELECT Switch

You can select amplifier's sync mode from **MASTER**, **SYNC** and **SYNC INV.** For the position of the **MODE SELECT** switch, see the "Connecting the Speaker wires" section.

Bass Boost Level Control

Bass boost level control can boost the level around the frequency selected by the bass boost frequency control from 0 to 12 dB.

Slope Select Switch

You can select a slope for the LPF from -18 and -24 dB.

Subsonic Select Switch

The subsonic filter cuts inaudible frequencies below 20 Hz to eliminate unwanted vibrations and minimize power loss.

Power Indicator

The power indicator lights when the power is switched on.

